

Remarks

The Final Office Action of June 3, 2009, has been carefully reviewed and these remarks are responsive thereto. Upon entry of the present paper, claims 1-23, 39-58, 61-62 are pending. Claims 1, 39, 47, and 53 have been amended without adding new matter. Claims 24-38 and 59-60 have been cancelled and claims 61-62 have been added. The Examiner is respectfully requested to call the undersigned by phone if it is felt that this response does not place the Application in condition for allowance. The Final Office Action's rejections are as follows:

- Claims 1-6, 12-14, 39, 41-50, 52-56, and 58-60 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Chapman et al. (US 7,324,515), hereinafter Chapman.
- Claims 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Nikolich et al. (US 6,853,680), hereinafter Nikolich, and further in view of Ma et al. (US 2005/0177861), hereinafter Ma.
- Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Chapman et al. (US 7,349,430), hereinafter Chapman B.
- Claims 7-11 and 18-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Abramson et al. (US 2003/0120819), hereinafter Abramson.
- Claim 40 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of BUNN et al. (US 2008/0010300), hereinafter BUNN.
- Claim 51 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Rakib (US 2002/0019984), hereinafter Rakib.
- Claim 57 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman and further in view of Rakib.

Interview Summary

Applicants would like to thank the Examiner and his Supervisor for their time during the interview conducted on August 11, 2009. During the interview, it was agreed that the prior art of record did not teach the heretofore unclaimed feature disclosed in the second paragraph of page 7 of the specification (See—"A media control access (MAC) address of each tunnel type 182 may

be used by the CPE 22 or other downstream device to locate desired tunnels 154-162.”) Upon entry of this paper, Applicants have added this previously unclaimed feature to independent claims 61-62. In addition, there was no agreement on the issue of the differences between the out-of-band tunnels in all of the pending independent claims with those in the Chapman reference. Hence, more arguments are presented in support of the allowance of these claims for this additional reason.

Independent Claim 1 and Dependent Claims 2-17

Amended claim 1 recites the following feature:

a gateway configured to output signals on at least two types of data tunnels for transfer over a cable network to Customer Premises Equipment (CPE), each data tunnel characterized as a one-way data stream of out-of-band (OOB) messaging signals, where each type of data tunnel is associated with a different type of OOB messaging signal such that different types of data tunnels transfer different types of OOB messages.

In column 6, lines 7-17, Chapman states that “proxy 97 can be used for receiving OOB messaging from multiple servers 76-82. Each server 76-82 may be used for a different OOB messaging service. For example, server 76 may be used for an electronic programming guide (EPG) service and server 80 may be used for an emergency notification service.” Even though the *servers* in Chapman may send different OOB messages to a *proxy at the headend*, this is still not equivalent to a “a gateway configured to output signals on at least two types of data tunnels for transfer over a cable network to Customer Premises Equipment (CPE), each data tunnel characterized as a one-way data stream of out-of-band (OOB) messaging signals, where each type of data tunnel is associated with a different type of OOB messaging signal such that different types of data tunnels transfer different types of OOB messages,” as claimed (emphasis added). The servers 76-82 of Chapman and proxy 97 are both located at the headend and, therefore, the communications lines established between them do not transfer data to customer premises equipment, as claimed.

Moreover, Figure 1 of Chapman shows a block diagram of a proxy scheme used in a cable network. Within Figure 1, only one OOB message 20 is shown being transported to

multiple clients. Thus, within Chapman, different tunnels are used to transfer OOB messages to multiple CPE; however, each tunnel to the CPE is not “associated with a different type of OOB messaging signal such that different types of data tunnels transfer different types of OOB messages,” as claimed.

None of the cited references (e.g. Chapman, Abramson, Ma, Nikolich, and ChapmanB, etc) overcome these deficiencies, and for at least these reasons, Applicants submit that independent claim 1 distinguishes over the references of record and is in condition for allowance. Claims 2-17 depend from claim 1 and are distinguishable for at least the same reasons as claim 1, and further in view of the various features recited therein.

Independent Claim 18 and Dependent Claims 19-23

Claim 18 recites features similar to those of claim 1 discussed above. Hence, for reasons similar to those given above for claim 1, Applicants submit that independent claim 18 distinguishes over the references of record and is in condition for allowance. Claims 19-23 depend from claim 18 and are distinguishable for at least the same reasons as claim 18, and further in view of the various features recited therein.

Independent Claim 39 and Dependent Claims 40-46

Amended independent claim 39 recites, among other features, the following:

transmitting the data services information, out-of-band signals, and application data to Customer Premises Equipment (CPE) on two-way output channels and a plurality of different types of one-way output data tunnels, each different type of out-of-band signal sent on a different type of data tunnel.

For reasons similar to those given above for claim 1, neither Chapman nor any of the secondary references teach this feature of claim 39. For at least these reasons, Applicants submit that independent claim 39 distinguishes over the references of record and is in condition for allowance. Claims 40-46 depend from claim 39 and are distinguishable for at least the same reasons as claim 39, and further in view of the various features recited therein.

Independent Claims 47 and 53 and their dependent claims

Independent claims 47 and 53 have features similar to those of claim 1 discussed above. Therefore, the Applicants submit that claims 47 and 53 are in condition for allowance for at least similar reasons given in support of claim 1. Dependent claims 48-52 and 54-58 depend on one of these independent claims and are in condition for allowance at least due to their dependence on an allowable claim as well as the features they recite.

New Independent Claims 61 and 62

New independent claims 61 and 62 have features similar to those of claim 1 discussed above. Therefore, Applicants submit that claims 61 and 62 are in condition for allowance for at least similar reasons given in support of claim 1.

In addition, as a further reason for allowance, independent claim 61 recites the following feature:

wherein a media access control (MAC) address of each tunnel type is used by the CPE to locate a desired tunnel

None of the references of record teach this feature of new independent claim 61. For instance, Chapman uses well-known Ethernet addresses to transport packets to clients. (See Chapman, column 6, ll. 26-31, "The proxy 97 in each of the CMTSs 92-96 determine which of the IP addresses in packets 84-90 require insertion of a well-known Ethernet address. These packets are encapsulated with Ethernet frames including an associated well-known Ethernet address.") New independent claim 62 contains a similar feature to claim 61. Therefore, for this additional reason, Applicants submit that independent claims 61 and 62 are in condition for allowance.

All objections and rejections have been addressed. Hence, it is respectfully submitted that the present application is in condition for allowance, and a notice to that effect is earnestly solicited.

Respectfully submitted,

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